

WHAT IS CLAIMED IS:

1. A device for installing engine components on an engine, the device comprising:
a first member configured to couple to the engine;
a second member interconnected to the first member, the first and second members being coaxially aligned and defining a longitudinal axis, the second member being configured to move relative to the first member along the longitudinal axis;
a rack and pinion arrangement that provides movement of the second member relative to the first member.
2. The device of claim 1, wherein the installation device is configured to install a bearing on an engine.
3. The device of claim 1, wherein the installation device is configured to install a seal on the engine.
4. The device of claim 1, further including an installer piece selectively mountable to an end of the second member, the installer piece being configured to contact and install an engine component.
5. The device of claim 4, wherein the installer piece is a first installer piece, the device further including a second installer piece that is selectively interchangeable with the first installer piece.
6. The device of claim 1, wherein the first member includes a threaded connection configured to couple to a crankshaft of the engine.
7. The device of claim 1, wherein the second member includes a housing having a central bore, the first member being positioned within the central bore of the housing.

8. The device of claim 7, wherein the housing includes a first housing portion and a second housing portion, the first housing portion defining the central bore.
9. The device of claim 8, wherein the second housing portion defines a second bore extending in a direction generally perpendicular to the central bore of the first housing portion.
10. The device of claim 9, wherein the second bore of the second housing portion extends into the central bore of the first housing portion.
11. The device of claim 8, wherein the rack and pinion arrangement includes a rack interconnected to the first member and a pinion gear positioned within the second housing portion of the housing, the pinion gear being configured to engage the rack to provide linear translation of the second member relative to the first member upon rotation of the pinion gear.
12. The device of claim 1, wherein the rack and pinion arrangement includes a gear arranged to engage a rack to provide linear translation of the second member relative to the first member.
13. The device of claim 12, wherein the gear is coupled to the second member, and wherein rotation of the gear provides linear translation of the second member relative to the first member.
14. The device of claim 13, further including a cap coupled to the gear, the cap including a socket wrench attachment.
15. The device of claim 12, wherein the rack is positioned within a slot formed in the first member.

16. The device of claim 1, further including a stop arrangement that limits the movement of the second member relative to the first member, the movement being limited between a non-translated position and a fully translated position.
17. The device of claim 16, wherein the stop arrangement is partially defined by a slot formed in the first member.
18. The device of claim 17, wherein the stop arrangement further includes a set screw positioned to move along the slot formed in the first member, the set screw further being positioned to engage ends of the slot to limit movement between the non-translated position and the fully translated position.
19. A method of installing engine components on an engine, the method comprising the steps of:
- providing an installation device, the installation device including a first member, a second member interconnected to and coaxially aligned with the first member, and a rack and pinion arrangement configured to provide movement of the second member relative to the first member;
 - placing an engine component adjacent to an installation location of the engine;
 - coupling the first member to the engine; and
 - seating the placed engine component at the installation location by rotating a gear of the rack and pinion arrangement to translate the second member and the engine component relative to the first member.
20. The method of claim 19, further including selecting an installer piece corresponding to the engine component and mounting the installer piece on the second member of the installation device.
21. A device for installing engine components on an engine, the device comprising:

a first member and a second member coaxially aligned and defining a longitudinal axis, the second member being configured to move relative to the first member along the longitudinal axis;

a rack and pinion arrangement that provides movement of the second member relative to the first member;

the first member including a first connection configured to couple to an engine;

the second member including an end having a first configuration corresponding to a first engine component for placement of the first engine component on an engine; and

at least a first installer piece selectively positionable on the end of the second member, the first installer piece having a second configuration different than the first configuration of the second member, the second configuration of the first installer piece corresponding to a second engine component for placement of the second engine component on an engine.

22. The device of claim 21, wherein the installation device further includes an adapter selectively connectable with the first connection of the first member, the adapter including an adapter connection configured to couple to an engine.

23. The device of claim 22, wherein the first connection of the first member is a first threaded connection, and wherein the adapter connection of the adapter is a threaded adapter connection, the threaded adapter connection of the adapter being different than the first threaded connection of the first member.

24. The device of claim 22, wherein the installation device further includes a second installer piece selectively positionable on the end of the second member, the second installer piece having a third configuration different than the first or second configurations of the second member and the first installer piece, the third configuration of the second installer piece corresponding to a third engine component for placement of the third engine component on an engine.